

REMARKS

Claims 1-2, 4 through 19, and 27 through 33 stand rejected under 35 USC 102(b) as anticipated (fully met) by Ray US Patent 6,416,649. The Examiner states that Ray discloses the method of producing an inert anode comprising the method of providing a metal-ceramic substrate, forming a molten metal oxide compound comprising ferrite and nickel, and coating the substrate. In actuality, the foregoing sets forth the present invention, not the Ray invention. Ray forms his anode by sintering of metal oxide powders in an inert atmosphere, which differs dramatically from the invented process for forming an anode, which produces a cast ceramic anode from a molten nickel-ferrite bath. Ray refers only to methods of fabricating inert anodes by "powder sintering, sol-gel processes, slip casting and spray forming" (see column 4, line 56-60).

All of these methods of Ray are utilized for solid state ceramic monoliths that are then fired. Literature and practice is replete with examples of spinel monoliths produced by the solid-state reactions of ceramic oxides. However, unlike the prior art, the present invention is a method for making an inert anode by forming a molten metal oxide compound, and coating a substrate with the molten compound. The Ray patent does not envisage utilizing a molten ceramic bath to fabricate a cast ceramic anode because, to the best of Applicants' knowledge, prior to the invention of Applicants' process, no one had ever fabricated spinel castings using a molten process. Ray never suggests that a molten ceramic bath could be used to make an inert anode,

however, the Ray Patent does mention a molten cryolite bath. This has no applicability to the present invention. Clearly, therefore, claims 1-2, 4-19, and 27-33 are not fully met by the cited Ray reference within the meaning of 35 USC 102(b), and it is respectfully requested that this ground of rejection be withdrawn.

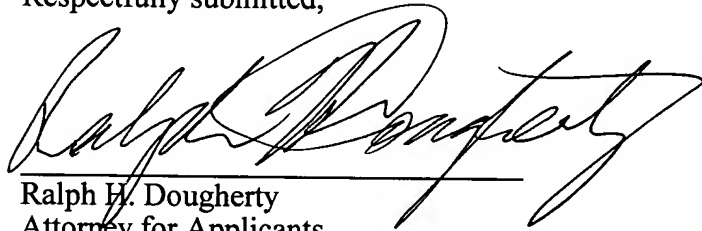
Claims 3 and 20 through 26 stand rejected under 35 USC 103(a) as obvious from the Ray patent. The Examiner admits that Ray does not have a post coating heat treatment, nor does he slow cool the anode, alleging that it would have been obvious to post heat treat the anode to make it stronger. Strength of an anode is not a consideration, so there is no likelihood that one of ordinary skill in the art would want to make it stronger. Applicants state on page 11, lines 8-10 of their Specification: "This post heat treatment is for stress relief, phase composition adjustment, as required, and final microstructure adjustment". Since this is for a completely different reason, it cannot be said that the post coating heat treatment is obvious. Further, since claims 3 and 20-26 are dependent on claim 1, either directly, or through another claim, they should be equally patentable with claim 1. Clearly, Ray fails to render the claims obvious within the meaning of 35 USC 103(a).

The DeMilla reference, which was cited but not applied, has been reviewed, but clearly is no more pertinent to the claims than the reference cited in the rejections.

Since the amendment to the claims does not add more claims than previously paid for, no additional fee is required.

In view of the foregoing amendment and these remarks, allowance of all claims remaining in the subject application is now believed to be in order, and such favorable action is respectfully requested on behalf of Applicants.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Ralph H. Dougherty", written over a horizontal line.

Ralph H. Dougherty
Attorney for Applicants
Registration No. 25,851
DOUGHERTY | CLEMENTS
1901 Roxborough Road, Suite 300
Charlotte, North Carolina 28211
Telephone: 704/366-6642
Fax: 704/366-9744

Attorney's
Docket 3519